

Winter Storms and Extreme Cold

While the danger from winter weather varies across the country, nearly all Americans, regardless of where they live, are likely to face some type of severe winter weather at some point in their lives. That could mean snow or subfreezing temperatures, as well as strong winds or even ice or heavy rain storms. One of the primary concerns is the winter weather's ability to [knock out heat, power and communications services](#) to your home or office, sometimes for days at a time. The National Weather Service refers to winter storms as the “Deceptive Killers” because most deaths are indirectly related to the storm. Instead, people die in traffic accidents on icy roads and of hypothermia from prolonged exposure to cold. It is important to be prepared for winter weather before it strikes.

Step 1: Get a Kit

- Get an [Emergency Supply Kit](#) which includes items like non-perishable food, water, a battery-powered or hand-crank radio, extra flashlights and batteries.
- Thoroughly check and update your family's [Emergency Supply Kit](#) before winter approaches and add the following supplies in preparation for winter weather:
 - **Rock salt** to melt ice on walkways
 - **Sand** to improve traction
 - **Snow shovels** and other snow removal equipment.
 - Also include **adequate clothing and blankets** to keep you warm.

Step 2: Make a Plan

Prepare Your Family

- Make a [Family Emergency Plan](#). Your family may not be together when disaster strikes, so it is important to know how you will contact one another, how you will get back together and what you will do in case of an emergency.
- Plan places where your family will meet, both within and outside of your immediate neighborhood.
- It may be easier to make a long-distance phone call than to call across town, so an out-of-town contact may be in a better position to communicate among separated family members.
- You may also want to inquire about emergency plans at places where your family spends time: work, daycare and school. If no plans exist, consider volunteering to help create one.
- Take a Community Emergency Response Team (CERT) class from your local [Citizen Corps chapter](#). Keep your training current.

Step 3: Be Informed

Prepare Your Home

- Make sure your home is well insulated and that you have weather stripping around your doors and windowsills to keep the warm air inside.
- Insulate pipes with insulation or newspapers and plastic and allow faucets to drip a little during cold weather to avoid freezing.
- Learn how to shut off water valves (in case a pipe bursts).
- Keep fire extinguishers on hand, and make sure everyone in your house knows how to use them. House fires pose an additional risk as more people turn to alternate heating sources without taking the necessary safety precautions.
- Know ahead of time what you should do to help elderly or disabled friends, neighbors or employees.
- Hire a contractor to check the structural stability of the roof to sustain unusually heavy weight from the accumulation of snow - or water, if drains on flat roofs do not work.
- If you have a car, fill the gas tank in case you have to leave. In addition, check or have a mechanic check the following items on your car:
 - Antifreeze levels - ensure they are sufficient to avoid freezing.
 - Battery and ignition system - should be in top condition and battery terminals should be clean.
 - Brakes - check for wear and fluid levels.
 - Exhaust system - check for leaks and crimped pipes and repair or replace as necessary. **Carbon monoxide is deadly and usually gives no warning.**
 - Fuel and air filters - replace and keep water out of the system by using additives and maintaining a full tank of gas.
 - Heater and defroster - ensure they work properly.
 - Lights and flashing hazard lights - check for serviceability.
 - Oil - check for level and weight. Heavier oils congeal more at low temperatures and do not lubricate as well.
 - Thermostat - ensure it works properly.
 - Tires - make sure the tires have adequate tread. All-weather radials are usually adequate for most winter conditions. However, some jurisdictions require that to drive on their roads, vehicles must be equipped with chains or snow tires with studs.
 - Windshield wiper equipment - repair any problems and maintain proper washer fluid level.

Familiarize yourself with the terms that are used to identify winter weather

- **Freezing Rain** creates a coating of ice on roads and walkways.
- **Sleet** is rain that turns to ice pellets before reaching the ground. Sleet also causes roads to freeze and become slippery.
- **Winter Weather Advisory** means cold, ice and snow are expected.
- **Winter Storm Watch** means severe weather such as heavy snow or ice is possible in the next day or two.
- **Winter Storm Warning** means severe winter conditions have begun or will begin very soon.

- **Blizzard Warning** means heavy snow and strong winds will produce a blinding snow, near zero visibility, deep drifts and life-threatening wind chill.
- **Frost/Freeze Warning** means below freezing temperatures are expected.
- When a **Winter Storm WATCH** is issued
 - Listen to NOAA Weather Radio, local radio, and television stations, or cable television such as The Weather Channel for further updates.
 - Be alert to changing weather conditions.
 - Avoid unnecessary travel
- When a **Winter Storm WARNING** is issued
 - Stay indoors during the storm.
 - If you must go outside, several layers of lightweight clothing will keep you warmer than a single heavy coat. Gloves (or mittens) and a hat will prevent loss of body heat. Cover your mouth to protect your lungs.
 - Walk carefully on snowy, icy, walkways.
 - If the pipes freeze, remove any insulation or layers of newspapers and wrap pipes in rags. Completely open all faucets and pour hot water over the pipes, starting where they were most exposed to the cold (or where the cold was most likely to penetrate).
 - Maintain ventilation when using kerosene heaters to avoid build-up of toxic fumes. Refuel kerosene heaters outside and keep them at least three feet from flammable objects.
 - Avoid traveling by car in a storm, but if you must...
 - Carry an Emergency Supply Kit in the trunk.
 - Keep your car's gas tank full for emergency use and to keep the fuel line from freezing.
 - Let someone know your destination, your route, and when you expect to arrive. If your car gets stuck along the way, help can be sent along your predetermined route.
 - Eat regularly and drink ample fluids, but avoid caffeine and alcohol.
 - Conserve fuel, if necessary, by keeping your residence cooler than normal. Temporarily close off heat to some rooms.

Listen to Local Officials

Learn about the emergency plans that have been established in your area by your [state and local government](#). In any emergency, always listen to the instructions given by local emergency management officials. For further information on how to plan and prepare for winter storms as well as what to do during and after a winter storm, visit: [Federal Emergency Management Agency](#), [NOAA Watch](#), or [American Red Cross](#).